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EXAMINER	
NORDMEYER, PATRICIA L	

ART UNIT	PAPER NUMBER
1772	

DATE MAILED: 05/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

MV

Office Action Summary	**Application No.** 10/678,021	**Applicant(s)** FINGER, JOHN	
	Examiner Patricia L. Nordmeyer	**Art Unit** 1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14 and 18-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *15-17* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *10/03, 11/04*.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

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DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-14 and 18-23, drawn to a multi-layered laminate, a thermally imaged multi-layered laminated durable label and a multi-layered laminate construction, classified in class 428, subclass 40.1.

II. Claims 15-17, drawn to a process for forming a thermally imaged multi-layered laminate construction, classified in class 156, subclass 60.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions Group II, claims 15 - 17 and Group I, claims 1 – 14 and 18 – 23 are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the product can be made using a materially different process such as extruding the layers of the labels together at the same time.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Karlyn Schnapp on February 23, 2005 a provisional election was made with traverse to prosecute the invention of Group I, claims

1-14 and 18-23. Affirmation of this election must be made by applicant in replying to this Office action. Claims 15 – 17 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1, 2, 4, 5, 7, 18, 19 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2, 16 and 20 of copending Application No. 10/678,020. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are both directed towards laminate constructions using polymer materials chosen from polyolefins and polyesters coated with active direct thermal layers for forming images, wherein the active direct thermal layer may be covered by a direct thermal topcoat or/and a radiation cured thermal topcoat.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

8. Claims 1 – 14 and 18 – 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "first surface of the metal oxide layer" in claim 1. There is insufficient antecedent basis for this limitation in the claim. A first or second surface of the metal oxide layer is not mentioned in the claim language of claim 1.

The phrase "one or more color coating layers applied to a binder layer" in claim 9 is unclear, which renders the claim vague and indefinite. Where is the "binder layer" in the article? There is no previous mention of the limitation with regard to the other layers. Does it need to be in a certain location, i.e. in between the active direct thermal layer and the direct thermal topcoat layer? Can it be the top most layer of the laminate?

The phrase "a UV-cured chemical resistant barrier topcoat generally covering the entire first surface" in claim 12 is unclear, which renders the claim vague and indefinite. What entire first surface is being referred, the entire laminated label or a color coating layer, which is below it?

The phrase “a support material comprising a polyester base layer coated on a first surface” in claim 12 is unclear, which renders the claim vague and indefinite. Is the non-stoichiometric aluminum oxide layer coated on the first surface of the polyester base or is the polyester base layer coated on the first surface of another layer?

The phrases “an active direct thermal layer, having a first and second surface, overlying said first surface of the aluminum oxide layer” and “a direct thermal top coat layer which covers the first surface of the aluminum oxide layer” in claim 18 are unclear, which renders the claim vague and indefinite. How is the aluminum oxide layer covered or overlaid by two different layers on its first surface? Are the layers stacked upon one another?

The phrase “one or more color coating layers applied to a binder layer” in claim 22 is unclear, which renders the claim vague and indefinite. Where is the “binder layer” in the article? There is no previous mention of the limitation with regard to the other layers. Does it need to be in a certain location, i.e. in between the active direct thermal layer and the direct thermal topcoat layer? Can it be the top most layer of the laminate?

Claims2-8, 10, 11, 13, 14, 19 – 21 and 23 are also rejected under 35 U.S.C. 112 second paragraph due to their dependency on the above rejected claims.

Correction/clarification is required.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1 – 6, 9, 18 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Zait et al. (USPN 5,693,415).

Zait et al. disclose a multi-layered laminate construction (Column 1, line 49) comprising a support material having a first surface and second surface, wherein the support material may be either paper or polymer chosen from polyolefin, polyester or blends there of, wherein the polyester is selected from polycarbonate and polyethylene terephthalate and wherein the support material is non-cavitated (Column 2, lines 59 – 65) and the first surface of the support layer is coated with a metal oxide layer of non-stoichiometric aluminum oxide (Column 2, lines 7 – 12); an active direct thermal layer, having a first and second surface, overlying said first surface of the metal oxide layers, said active direct thermal layer having a color developing mechanism reactive to transmissions of heat through either the first or second surface of the active direct thermal layer for forming images within the active direct thermal layer(Column 5, line 36 – the second aluminum layer; Column 5, lines 65 to Column 6, line 3; Column4, lines 43 – 46) and wherein the first surface of the active direct thermal is covered with a direct thermal top coat layer (Column 3, line 62; Figure 1, #18) as in claims 1 – 6, 18 and 19. With regard to claim 6, the formed image is readable in the near-infrared (Column 5, lines 1 –

3). The laminate further comprises one or more color coating layers applied to a binder layer (Column 5, lines 39 – 43) as in claim 9.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zait et al. in view of Ichiro et al. (EP 0 780 241).

Zait et al. disclose a multi-layered laminate construction as disclosed above. However, Zait et al. fail to disclose that the laminate further comprises a radiation-curable topcoat applied to the top layer of the laminate.

Ichiro et al. teach a thermosensitive recording material with a paper or polymer substrate (Page 2, lines 12 – 13) with a radiation-curable protective topcoat applied to the top layer of the laminate (Page 3, lines 21 – 23) for the purpose of having a material with high heat resistance, excellent thermal releasability and sufficient binding properties for improving the head-matching properties (Page 3, lines 6 – 9).

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the radiation curable protective topcoat on the top layer of the laminate in Zait et al. in order to have a material with high heat resistance, excellent thermal releasability and sufficient binding properties for improving the head-matching properties as taught by Ichiro et al.

13. Claims 7, 8, 20, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zait et al. in view of Chang (USPN 5,898,017).

Zait et al. disclose a multi-layered laminate construction as disclosed above where the formed image is readable in the near-infrared (Column 5, lines 1 – 3), and the laminate further comprises one or more color coating layers applied to a binder layer (Column 5, lines 39 – 43). However, Zait et al. fail to disclose that the laminate further comprises a radiation-curable topcoat applied to the top layer of the laminate and a primer layer that is applied to the first surface of the active direct thermal layer.

Chang teaches a laminate comprises a radiation-curable topcoat applied to the top layer of the laminate as a protection coat (Column 2, lines 7 – 8) and a primer layer that is applied to the first surface of the active direct thermal layer (Column 2, lines 45 – 49) in a multicolor chromogenic system in a document having multiply coatings for the purpose of highlighting information and determining authenticity (Column 1, lines 7 – 11).

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the radiation-curable topcoat and primer layer in Zait et al. in order to have document having multiply coatings for the purpose of highlighting information and determining authenticity as taught by Chang.

14. Claims 10 – 14 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zait et al. in view of Chang and Rochford et al. (USPN 6,755,350).

Zait et al. disclose a multi-layered laminate construction (Column 1, line 49) comprising a support material having a first surface and second surface, wherein the support material may be either paper or polymer chosen from polyolefin, polyester or blends there of, wherein the polyester is selected from polycarbonate and polyethylene terephthalate and wherein the support material is non-cavitated (Column 2, lines 59 – 65) and the first surface of the support layer is coated with a metal oxide layer of non-stoichiometric aluminum oxide (Column 2, lines 7 – 12); an active direct thermal layer, having a first and second surface, overlying said first surface of the metal oxide layers, said active direct thermal layer having a color developing mechanism reactive to transmissions of heat through either the first or second surface of the active direct thermal layer for forming images within the active direct thermal layer(Column 5, line 36 – the second aluminum layer; Column 5, lines 65 to Column 6, line 3; Column4, lines 43 – 46) and wherein the first surface of the active direct thermal is covered with a direct thermal top coat layer (Column 3, line 62; Figure 1, #18). The formed image is readable in the near-infrared (Column 5, lines 1 – 3). The laminate further comprises one or more color coating layers applied to a binder layer (Column 5, lines 39 – 43). However, Zait et al. fail to disclose that the laminate further comprises a radiation-curable topcoat applied to the top layer of the laminate, a primer layer that is applied to the first surface of the active direct thermal layer, the laminate further comprises a chemically resistant pressure sensitive adhesive applied to the second surface of the support material with a silicone coated liner laminated to the second surface of the pressure sensitive adhesive, the line release liner being polyester, the label is for use in pathology, hematology and general laboratory uses and the UV-cured chemical resistant barrier topcoat may be applied by flexography, offset, screen-printing or other similar techniques.

Chang teaches a laminate comprises a radiation-curable topcoat applied to the top layer of the laminate as a protection coat (Column 2, lines 7 – 8) and a primer layer that is applied to the first surface of the active direct thermal layer (Column 2, lines 45 – 49) in a multicolor chromogenic system in a document having multiply coatings for the purpose of highlighting information and determining authenticity (Column 1, lines 7 – 11).

Rochford et al. teach a label formed from a laminate that comprises a chemically resistant pressure sensitive adhesive (Column 9, lines 49 – 54) applied to the second surface of the support material with a silicone coated liner laminated to the second surface of the pressure sensitive adhesive, the line release liner being polyester (Column 10, lines 29 – 40) for the purpose of having a label liner with a desirable strength and toughness properties required for efficient transportation of the label in high speed equipment (Column 10, lines 39 – 40).

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the radiation-curable topcoat and primer layer in Zait et al. in order to have document having multiply coatings to highlighting information and determining authenticity as taught by Chang along with the release liner in order to have a label liner with a desirable strength and toughness properties required for efficient transportation of the label in high speed equipment as taught by Rochford et al.

With regard to claim 13 where the label is for use in pathology, hematology and general laboratory uses, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963).

The limitations of the UV-cured chemical resistant barrier topcoat may be applied by flexography, offset, screen-printing or other similar techniques in claim 14 are process limitations. The determination of patentability for a product claim with a process limitation is based on the product itself and not on the method of production. In this case, the limitation of applying a topcoat by flexography, offset, screen-printing or other similar techniques is a method of production and therefore does not determine the patentability of the product itself. The method of forming the product is not germane to the issue of patentability of the product itself. MPEP 2113.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia L. Nordmeyer whose telephone number is (571) 272-1496. The examiner can normally be reached on Mon.-Thurs. from 7:00-4:30 & alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Y. Pyon can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patricia L. Nordmeyer
Examiner
Art Unit 1772
pln

HAROLD PYON
supervisory PATENT EXAMINER
1772

5/13/05